



MEMORANDUM

To: Transportation Committee

From: CMAP staff

Date: January 2016

Re: Update on transit ridership growth study

GO TO 2040 includes goals to significantly increase public transit ridership over the next 25 years. This exploratory study, included in the [FY16 CMAP work plan](#), will evaluate more specifically what would have to occur to reach that goal, including transit capital investments as well as policy changes related to parking, roadway pricing, and land use, among others. The results will be used to inform the selection of recommended strategies and the process of setting targets for ridership growth in the region in the next long-range plan. The product is a report due in summer 2016. Staff is seeking feedback from the Transportation Committee on the direction and the details of the study. CMAP staff will request input from the Regional Transportation Authority (RTA) and the service boards over the next few months on appropriate study assumptions as well as circulate draft results for comment as they are completed.

Approach

The methodology of the study involves two main approaches: case studies of services and locations where ridership has recently increased in the region as well as modeling of system-level changes in ridership due to various strategies. The case studies are expected to shed light on both the transit service and the policy changes needed to spur new ridership. For the modeling element, the study will estimate how ridership -- interpreted as mode share -- would be affected by the implementation of different strategies with the goals of determining which have the most significant effects individually and how much ridership is gained when they are combined. Other metrics besides ridership will be computed as well, potentially including access to jobs by transit within a certain time threshold (for all riders as well as riders from environmental justice communities), change in transit passenger miles traveled, change in auto vehicle miles traveled, and potentially change in non-motorized trips or other measures. Changes in the geography of transit usage will also be reported for each strategy.

Strategies Currently Considered

The strategies currently under consideration are described below. The list is based on strategies previously recommended in regional plans, and the intensity of implementation of each of the strategies is intended to be a “best case” for the initiative. No attempt is being made at this stage to fiscally constrain the strategies under evaluation, but the next regional plan will ultimately do so. Clearly these strategies will have different magnitudes of impact. The study should suggest which strategies the region should focus on most to grow ridership, but also indicate how ridership gains would be distributed.

Capital and Operational Improvements

- **Reduce the state of good repair (SOGR) backlog.** The transit system has an extensive SOGR backlog, and rehabilitating certain elements of it may have effects on ridership. This will be modeled mostly as speed improvements resulting from track improvements, potentially with enhanced reliability or station amenities. Staff welcomes suggestions from the transit agencies on how best to represent SOGR improvements.
- **Increase service.** Previous modeling suggests, as expected, that reducing headways has a major impact on ridership. For bus service, this is mostly straightforward; for rail, it will be necessary to know which lines can accommodate more or longer trains.
- **Expand rail system.** This strategy is initially envisioned to include only the transit capital projects recommended in GO TO 2040. However, other smaller capacity improvements may be suggested by the service boards.
- **Enhance speed of bus system.** This strategy includes implementing bus and arterial rapid transit (BRT/ART) as well as TSP alone. The projects are assumed to be the six shorter-term Pace ART projects as well as the routes considered by Chicago Department of Transportation in its BRT study. The TSP-only corridors would be those which have already had CMAQ funding programmed for them under RTA sponsorship.
- **Improve last-mile connections.** The difficulty in connecting transit users from their station or stop to their final destination in lower-density environments is widely thought to impede growth in transit market share, particularly in the suburbs. This strategy would model an idealized solution to the last-mile problem in the form of a partnership with a transportation network company or bike-share outfit.
- **Provide better station and vehicle environments.** CMAP’s recently developed transit modernization model is able to represent potential transit users’ mode choices in response to various station and vehicle features and amenities. This generalized strategy would gauge the ridership impact of making the maximum possible station and vehicle improvements for each station, stop, or service.
- **Provide additional park-and-ride capacity.** Additional park-and-ride capacity may help support ridership growth in certain areas. This strategy would provide additional parking spaces up to estimated demand. Staff is seeking input from the service boards on how best to estimate demand for additional space at park-and-ride lots.

Policy Changes

- **Implement congestion pricing on existing expressway network.** Variable tolling that increases with congestion or time of day is meant to manage traffic, including by shifting some trips to transit. The GO TO 2040 financial plan included revenues from implementing variable tolling on a subset of the region's expressways; this strategy would estimate the transit ridership benefits of doing so.
- **Implement pricing for parking.** The GO TO 2040 financial plan included revenues from implementing parking pricing in the region, but pricing parking also encourages use of the transit system. For this study, parking pricing would be implemented in all areas within a half-mile of transit stations.
- **Increase residential density in areas served by transit.** Unlike the other strategies in which the transportation network is changed while underlying land use remains constant, this strategy changes land use while the transportation system remains the same. Residential densities near transit are initially proposed to be those recommended by the RTA in [Setting the Stage for Transit](#).
- **Increase employment density in areas accessible by transit.** Instead of altering residential density, this strategy changes employment density. Employment densities near transit are initially proposed to be those recommended by the RTA in [Setting the Stage for Transit](#).

Lessons for Setting Indicator Targets in Next Plan

The GO TO 2040 target of doubling transit ridership by 2040 is widely understood to be aspirational. While the next plan is also anticipated to contain ambitious transit usage targets, the study described in this memo will help spur discussion about the appropriate targets and ground them in an achievable set of strategies. It may also help shed light on whether other indicators of transit usage would be appropriate. More broadly, staff is beginning to consider how the next plan should set targets for other key transportation indicators, particularly congestion and greenhouse gas emission reduction, and will address the CMAP working committees with options later in the process, likely in fall 2016.

Action requested: Discussion